

What is claimed is:

1. A nucleic acid comprising
  - a) a first nucleotide sequence encoding a pro-apoptotic protein selected from the group consisting of DR4, tBid or a biologically active fragment thereof and any combination thereof, and
  - b) a second nucleotide sequence encoding a tumor-specific promoter selected from the group consisting of survivin promoter, MUC-1 promoter, htert promoter, CEA promoter, PSA promoter, alpha-fetoprotein promoter or a biologically active fragment thereof and any combination thereof, wherein second nucleotide sequence is operably linked to and directs the expression of the first nucleotide sequence.
2. The nucleic acid of claim 1, further comprising a third nucleotide sequence encoding a pro-apoptotic mediator selected from the group consisting of Bax, Smac, caspase 3, TRAIL or a biologically active fragment thereof and any combination thereof.
3. A vector comprising the nucleic acid of claims 1 or 2.
4. The vector of claim 3, wherein the vector is selected from the group consisting of AAV vector, lentivirus vector, adenovirus vector and a nonviral vector.
5. A composition comprising the nucleic acid of claims 1 or 2 or the vector of claims 3 or 4 in a pharmaceutically acceptable carrier.
6. The composition of claim 5, further comprising a chemotherapeutic agent.
7. A method of treating a cancer in a subject, comprising administering to the subject an effective amount of the nucleic acid of claims 1 or 2, the vectors of claims 3 or 4 or the composition of claims 5 or 6 to the subject, thereby treating the cancer in the subject.
8. A method of producing a viral vector comprising the nucleic acid of claim 1, comprising introducing into a cell in which viral vectors are produced:

a) a nucleic acid comprising a nucleotide sequence encoding one or more pro-apoptotic proteins, operably linked to one or more tumor-specific promoters and a viral packaging signal;

b) an siRNA construct and/or an antisense sequence that targets the nucleotide sequence encoding the one or more pro-apoptotic proteins of (a), either prior to, or simultaneously with introducing the nucleic acid of (a) into the cell; and

c) nucleic acid encoding viral structural proteins and/or nonstructural proteins necessary to produce viral structural proteins that package nucleic acid into a viral vector particle, under conditions whereby the nucleic acid of (a) is packaged into a viral vector particle, thereby producing the viral vector comprising the nucleic acid of claim 1.

9. A method of producing a viral vector comprising the nucleic acid of claim 1, comprising introducing into a cell in which viral vectors are produced:

a) a nucleic acid comprising a nucleotide sequence encoding one or more pro-apoptotic proteins, operably linked to one or more tumor-specific promoters and a viral packaging signal;

b) a nucleic acid encoding bcl-2 under the direction of an active promoter, either prior to, or simultaneously with introducing the nucleic acid of (a) into the cell; and

c) nucleic acid encoding viral structural proteins and/or nonstructural proteins necessary to produce viral structural proteins that package nucleic acid into a viral vector particle, under conditions whereby the nucleic acid of (a) is packaged into a viral vector particle, thereby producing the viral vector comprising the nucleic acid of claim 1.